provided and I was to set the specimen for her retention. In due course the event occurred and Denise stood purring sweetly and softly watching the wondrous event. Unfortunately at the final stage the emitting of meconium which failed to fall clear of the curtain found me suddenly in the midst of a domestic crisis! Furthermore, none of the many magic cleaning potions available would suffice. By nightfall, however, the washing-machine had successfully come to my aid, the stains had gone, *all* the lounge curtains presented a whiter than white effect, the butterfly was set and perfect tranquility again reigned!

I make no apologies for stressing the problems and difficulties, to which I might add lack of botanical knowledge, whereas I might have reflected a chapter from 'Tutt', for I have met and read of too many who imply the ease of collecting this and that whereas scholarship, luck and, more likely, much painstaking industry are the principal ingredients of success. After all we learn in the field, often by our failures, far more than can be indicated in the trays of well set specimens. Collecting at the end of the season, whatever may have been the various causes, I am thankful even to have returned having caught species comprising the *Morpho*, all three *Caligos*, 5 *Danaids*, 8 *Papilios*, 8 'Sulphurs', 16 *Heliconids* and similar kinds, 3 of the 4 *Hamadryads*, some beautiful 'Hairstreaks', all included in over 400 set specimens of 125 species.

And so ended a cycle commenced as boys when my cousin watched me curiously as I caught butterflies at Buddleia in our grand-mother's garden in the Isle of Wight in the early 20's. Little could we have known what he was being prepared for in distant lands in the middle 60's and I I am most grateful to him and his wife for their help and sympathy. My hope now is that in due course I may return to spend in Trinidad the end of May and the whole of June to tackle the deficiencies, collect some moths and, above all, to meet again Malcolm Barcant, his wife and others who were so kind to me during my happy and instructive stay.

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A note on the Butterflies of the Balearic Islands

By T. R. New

The majority of the few British lepidopterists who have written on the butterflies of the Balearic Islands have commented on the paucity of the fauna encountered. Jones (1906) considered that the extreme aridness of Majorca, combined with the resulting lack of variety of the vegetation was largely responsible for the few butterflies found there, and his views are borne out by Smith (1953). No endemic species of butterflies are known up to the present, but the subspecies *balearica* Rebel of *Polyommatus icarus* Rott. is confined to the Islands. The British literature on the Balearic butterflies is largely limited to notes on collecting on Majorca, but Walker (1906) recorded seventeen species from Minorca. Most of the butterflies present are probably found on all the islands in the group.

Bretherton (1966) considered that about twenty-nine species were present in the Balearics, but commented that *Callophrys rubi* L. appeared not to have been recorded from the group. This species was

listed by Holford (1915), and was found commonly during April, 1967, when the present author visited Majorca. Collecting was centred on Palma, and the butterflies encountered are listed below, using the terminology of Bretherton (loc. cit.). Twenty species were found during the period 2nd-14th April.

Carcharodes alceae Esp. Only two seen, both worn.

Papilio machaon L. Abundant, and mostly very large and fresh. Appear to be the subspecies *bigenerata* Vty., as suspected by Smith.

Pontia daplidice L. Fairly common in all areas around Palma.

Pieris brassicae L. Five specimens seen, all rather worn.

P. rapae L. Very common and variable in condition.

Colias crocea Fourc. One or two seen most days but never more commonly. No f. *helice* were seen.

Gonepteryx cleopatra L. Common in the hills around Palma, but only a few seen in the lower areas. All fresh.

Vanessa cardui L. A few specimens seen.

V. atalanta L. Fairly common.

Pararge aegeria L. Common, and varying from fresh to very worn.

P. megera L. Less abundant than *aegeria*, but usually found with it.

Pyronia cecilia Vall. Two worn specimens.

Coenonympha pamphilus L. Abundant everywhere.

Callophrys rubi L. Common in meadows around Palma, and also found further inland.

Lycaena phlaeas L. Three specimens found, all ssp. *eleus* F.

Syntarucus pirithous L. Not common, but several found on the hills around Genova.

Lampides boeticus L. One only, Genova.

Lycaenopsis argiolus L. One only, Palma.

Aricia cramera Esch. Fairly common. Fresh, and found mainly in meadows.

Polyommatus icarus balearica Rebel. Many small specimens of *icarus* were taken around Palma, and seem referable to this subspecies.

The butterfly fauna of the Balearics is more remarkable for its absence than for the species present. Several migratory species which are widespread and common in many parts of Southern Europe do not appear to have been recorded, notably *Colias australis* Vty. and *Issoria lathonia* L. Fritillaries are generally scarce, and several other Vanessids found on other Mediterranean islands also appear to be absent — for example *Polygonia egea* Cram. and *Aglais urticae* L. It would be interesting to learn if these have become extinct there, or have never reached the Balearics. There is little evidence of recent speciation, apart from *P.i. balearica*, and it is rather surprising that other non-migratory species have not evolved peculiar forms. With the exception of a very few African elements (*Charaxes jasius*, L., *A. cramera*) which are also found elsewhere in Southern Europe, the fauna is typically palaearctic in character.

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26.iv.1967.

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Tipulidae (Dipt.) in Central and North Wales

By R. M. Payne and A. E. Stubbs

We spent the first few days of June 1966 collecting Diptera in Central and North Wales. Entering Wales at Stanner Rocks, Radnor, we collected by the River Wye and in one or two other places near Rhayader, and then moved north to spend our second night at Dolgellau, collecting on the barren hills of Montgomeryshire during the morning, and on the southern slopes of Cader Idris in the afternoon. On the third day, we had a successful morning by the side of the Mawddach estuary near Llanelltyd, followed by some very warm hours on the dunes at Llanbedr and Harlech, and then a dash inland to the wood at the head of Cwm Bychan. That night we stayed at Harlech. The following morning we explored the wooded ravine between Maentwrog and Trawsfynydd Reservoir and in the afternoon we moved into Caernarvonshire. Unfortunately, the weather now broke and cut short our collecting near Criccieth, but on our final day we managed some useful stops by the roadside on our way south, culminating in a productive couple of hours in a wood at Llanfair Caereinion.

We are grateful to the Nature Conservancy for permission to visit and collect in a number of Reserves.

The following notes, arranged by county and habitat, deal with Tipulidae, of which we found and identified 80 species (over one quarter of the British fauna) and Ptychopteridae, of which we found two species. Other flies collected (mainly by A.E.S.) will be the subject of a subsequent article.

Little is known of the ecological requirements of Tipulidae, but since the early stages of many species live in damp soil, some comment on geology and rainfall (taken from the 10 miles-to-the-inch rainfall map published by the Ordnance Survey) is included. Potential water deficit is probably more important than actual rainfall, but no detailed maps are available. The habitat descriptions include aspect, slope and vegetation as thought relevant, factors which affect both soil drainage and the life of the adult insect.

RADNOR, V.C. 43

Stanner Rocks. G.R. 32/262583. Annual rainfall 35-40 ins. Sweeping basic grassland here on 1st June produced only a single *Tipula vernalis* Mg.

Marteg Bridge. G.R. 22/952715. Rainfall 50 ins. We spent some time by the River Wye 2½ miles north of Rhayader (alt. 740 feet) on 1st June. Sweeping in the lush vegetation on the steep wooded bank, where ferns, Giant Woodrush and Meadow Sweet were growing under Alder and